

REMARKS

Claims 1-19 are pending in the present application. In the Office Action, claims 1-19 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated U.S. Patent No. 6,101,378 (Barabash). The Examiner's rejections are respectfully traversed.

Independent claims 1, 9, 15, and 19 set forth, among other things, receiving unencrypted control codes and encrypted user data over a communications channel and transmitting an upstream data signal over the communications channel based on the control codes.

In contrast, Barabash simply describes a conventional cellular system with a mobile unit communicating with a base station. Barabash mentions sending encrypted user data over the communication channel, but fails to teach sending unencrypted control codes to a physical layer hardware unit for use in setting transmission assignments for transmitting an upstream data signal. The passage cited by the Office Action to support this rejection broadly discusses exchanging control information between the base station and the mobile unit. There are no teachings regarding the format of the control information. This control information is only mentioned in the claims section of Barabash, and no details are provided in the detailed description. Absent any teaching, it is not reasonable to assert that the control information is exchanged in unencrypted form.

Conventional systems, such as GSM, encrypt the user data and the control codes using the subscriber key installed on the Subscriber Identification Module (SIM) card of the mobile device. The user data and control codes are extracted from the receive signal by the physical layer hardware in encrypted form. Decryption of the control codes and user data is a protocol layer function that does not occur in the physical layer. Hence the physical layer hardware

typically receives control codes from the protocol layer, not over the communication channel as set forth in claims 1, 9, 15, and 19.

Where anticipation is found through inherency, the Office's burden of establishing *prima facie* anticipation includes the burden of providing "...some evidence or scientific reasoning to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art." *Ex parte Skinner*, 2 U.S.P.Q.2d (BNA) 1788, 1789 (Bd. Pat. App. & Int. 1987).

Inherency in anticipation requires that the asserted proposition *necessarily* flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. (BNA) 323, 326 (C.C.P.A. 1981); *Levy*, 17 U.S.P.Q.2d (BNA) at 1463-64; *Skinner*, at 1789; *In re King*, 231 U.S.P.Q. (BNA) 136, 138 (Fed. Cir. 1986). It is not enough that a reference could have, should have, or would have been used as the claimed invention. "The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Oelrich*, at 326, quoting *Hansgtrg v. Kemmer*, 40 U.S.P.Q. (BNA) 665, 667 (C.C.P.A. 1939); *In re Rijckaert*, 28 U.S.P.Q.2d (BNA) 1955, 1957 (Fed. Cir. 1993), quoting *Oelrich*, at 326; *see also Skinner*, at 1789. "Inherency... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Ex parte Skinner*, 2 U.S.P.Q.2d (BNA) 1788, 1789 (Bd. Pat. App. & Int. 1987), citing *In re Oelrich*, 666 F.2d 578, 581 (C.C.P.A. 1981).

For this reason alone, Barabash fails to teach or suggest receiving unencrypted control codes and encrypted user data over a communications channel and transmitting an upstream data signal over the communications channel based on the control codes. Applicants respectfully requests the rejection of claims 1, 9, 15, 19, and all claims depending therefrom be withdrawn.

Independent claims 1 includes the additional feature of a software driver disposed between the physical layer hardware unit and a processing unit for interfacing therewith. A driver is employed by a general purpose processing device and provides a link between the processing device and the controlled hardware. The physical layer hardware configures the transmission parameters independent of the software driver, which receives and decrypts the user data in a protocol layer. This separation prevents the co-opting of the driver from affecting the transmission activities controlled by the physical layer hardware unit. In contrast, Barabash uses dedicated hardware and firmware, and as such, does not employ a software driver as commonly defined in the art. For this additional reason, claim 1, and all claims depending therefrom are allowable.

For at least the aforementioned reasons, Applicants respectfully submit that claims 1, 9, 15, 19, and all claims depending therefrom, are not anticipated by Barabash. Applicants request that the Examiner's rejections of claims 1-19 under 35 U.S.C. 102(e) be withdrawn.

Moreover, the dependent claims include additional features not taught or suggested by Barabash. The passages cited in the Office Action are general high level discussions, primarily in the summary and claims sections, that do not even suggest, much less provide an enabling teaching of, the features set forth in the claims. Applicants can only assume that the Office Action seeks to establish that all of these features are inherent in Barabash.

An anticipating reference by definition must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990). "[I]t is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 U.S.P.Q.2d (BNA) 1461, 1462 (Pat. & Tm. Off. Bd. Pat. App. & Int. 1990).


By way of illustration, claim 3 includes a demodulator in the physical layer hardware unit to generate the control codes from the received signal samples. The Office Action merely cites a general discussion of the modem at column 3 as teaching this feature. This passage does not even mention control codes, much less extracting the control codes in the physical layer hardware. This feature is not inherent, as the control codes are typically generated by a protocol layer, not the physical layer hardware.

The other dependent claims include additional features not met by the broad passages cited in the Office Action. Applicants respectfully request that the Examiner detail how each of these features is met or withdraw the rejections of these claims.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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